

National Aeronautics and Space Administration



Ames Research Center
Moffett Field, California 94035

March 24, 2022

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks & Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Attn: Mr. Mark Beason

Subject: Section 106 Consultation for the Building 158 Airside Accessibility Ramp Project at
Ames Research Center, Moffett Field, Santa Clara County, California

Dear Ms. Polanco:

The National Aeronautics and Space Administration (NASA) Ames Research Center (ARC) requests Section 106 consultation on the Building 158 Airside Accessibility Ramp Project (project or undertaking) at ARC, Moffett Field, Santa Clara County, California (Figures 1 and 2, attached). Planetary Ventures (PV) proposes to install an Americans with Disabilities Act (ADA)-compliant ramp to the airside (east) entrance of Building 158. The project requires permit approval from NASA ARC, and NASA ARC has determined that this project constitutes an undertaking under Section 106 of the National Historic Preservation Act of 1966 (54 United States Code §306108), as amended. In support of its responsibilities under Section 106, NASA ARC is providing the following analysis, which includes a description of the current undertaking, the area of potential effects (APE), identification efforts, a description of the affected historic properties, and an assessment of potential effects resulting from the undertaking for your review.

Description of the Undertaking

The proposed undertaking will involve the installation of a modular accessibility ramp adjacent to a concrete arrival platform at the airside (east) entrance to Building 158 (Photograph 1). In order to secure the ramp to the concrete arrival platform, the undertaking will require removal of a portion of an existing horizontal handrail (Photograph 2).

The ramp will be secured to the concrete arrival platform and will not obstruct the primary pathway along the center portion of the stair to the entry door. No alterations to the building's envelope will result from the construction of the proposed ramp, although an accessibility

symbol will be adhered to the existing door lite with a double-sided adhesive. The V-shaped modular ramp will extend roughly 20' from the building (Photograph 3).



Photograph 1: East side of Building 158 with concrete arrival platform at center (Page & Turnbull 2018).



Photograph 2. Concrete arrival platform at airside entrance (east) to Building 158.



Photograph 3. Proposed ramp configuration; inset photo of handrail facing the airfield.

The ramp's adjustable legs will be placed on hard-packed dirt and secured to paver stones for stability. The existing curb will be removed to accommodate the ramp's landing, which will be bolted to a new 5' x 7' concrete slab on top of a gravel base. The slab will extend no more than 12" below grade. Additional concrete will be poured at the landing if needed in order to match the existing asphalt grade.

The ramp will be approximately 12" from an existing air conditioning unit, and a wire mesh screen will be installed between the handrail and the air conditioning unit if needed for safety.

Area of Potential Effects

The APE was defined to address both direct and indirect potential effects on historic properties and includes the project footprint and Building 158. Due to the scale of the new ramp, the potential indirect (visual) effects of the undertaking will be limited to the immediate surroundings on the east side of Building 158 (Figure 3, attached). The vertical APE extends up to 12" below grade for the new concrete slab.

Identification Efforts

In a previous Section 106 consultation for a separate undertaking (NASA_2018_0306_001), NASA ARC and PV proposed other accessibility improvements for Building 158, including construction of a U-shaped accessibility ramp at the primary (west) entrance within an existing landscaped space south of, and adjacent to, the existing primary concrete walkway and stairs. For that Section 106 review, PV retained Page & Turnbull to prepare a technical study, *Building 158 Renovations Project Section 106 Technical Report*, dated March 2018. The analysis in the Page & Turnbull report was conducted by qualified architectural historians who meet the Secretary of

the Interior's professional qualifications standards. Based on that analysis, NASA ARC made a finding of No Adverse Effect with the State Historic Preservation Officer (SHPO)'s concurrence in a letter dated May 22, 2018. For reference, the March 2018 technical report is available at: https://historicproperties.arc.nasa.gov/downloads/s106_Bldg158_20180228_nasa_report.pdf.

Archaeological Resources

A comprehensive investigation of previous archaeological studies at ARC was completed in 2017 (AECOM 2017). This investigation involved a desktop survey of archival resources and a geoarchaeological assessment of the entire ARC site and included an assessment of archaeological sensitivity and the potential for buried archaeological resources. In a letter dated June 22, 2017, the SHPO found the study results acceptable as a baseline for future investigations and treatment of archaeological resources at ARC and as a reference for professionally qualified staff for future undertakings (NASA_2015_0928_001). The study identified areas of heightened prehistoric and historic-period archaeological sensitivity and also concluded that there is low potential for more deeply buried prehistoric archaeological resources across ARC. For reference, the 2017 ARS is available at:

https://historicproperties.arc.nasa.gov/downloads/s106_archaeology_20170224_nasa_att.pdf.

A review of the 2017 investigation indicates that the proposed work is in an area of low archaeological sensitivity (Figure 4, attached) and was not identified as sensitive for either prehistoric or historic-period resources. The nearest mapped areas of sensitivity are over 500' to the west and east. It is known that the amount of prior subsurface disturbance in this area is high from construction of the current building, curb, and parking lot, and therefore the potential for previously unidentified intact resources in the shallow area of ground disturbance for the undertaking is low. The portion of the APE where ground disturbance will occur is currently paved and covered with gravel, so no archaeological survey was conducted.

Architectural Resources

The APE is located within the expanded portion of the Naval Air Station (NAS) Sunnyvale Historic District, which was listed in the National Register of Historic Places (NRHP) on February 24, 1994. The district was listed under NRHP Criteria A and C in the areas of Military History, Architecture, and Engineering, uniquely representing the development of U.S. naval aviation prior to World War II as one of two stations built to port lighter-than-air dirigibles in the 1930s. The listed periods of significance were 1930-1935 and 1942-1946. Hangars 1, 2, and 3 particularly represent twentieth-century military planning, engineering, and construction as some of the last extant gigantic airship hangars in the United States. The core of the historic station is centered on Shenandoah Plaza and buildings that incorporate Spanish Colonial Revival design. The district nomination included several contributing buildings and structures that generally date to the 1930s to 1940s NAS Sunnyvale/Moffett Field period and exhibit the Spanish Colonial Revival style (with some exceptions, including Hangars 1, 2, and 3).

In 2013, a historic property survey of Moffett Field was conducted to evaluate the significance of additional resources related to the airfield and concluded that the airfield and related resources are eligible for the NRHP under an expanded context for the NAS Sunnyvale Historic District (AECOM 2013). The SHPO concurred on expanding the boundary of the district in a letter dated June 6, 2013 (NASA_2013_0417_001) with a revised period of significance of 1942-1961 for the airfield. It also revised the district's statement of significance to include World War II

military missions. The 2013 report identified potential contributors to the expanded district, including Building 158, the Air Traffic Operations and Control Tower.

Affected Historic Properties

Building 158

Constructed in 1954, the Air Traffic Operations and Control Tower (Building 158) was historically used as the center for airfield operations and air traffic control at Moffett Field (Photograph 4). The facility was necessary due to Moffett Field's rapid growth during the 1950s, as a series of Naval jet squadrons were assigned to the airfield. In 2013, the property was identified as a contributing resource within the proposed expansion area of NAS Sunnyvale Historic District, which had an identified period of significance of 1942-1961 (AECOM 2013). The district was found to be significant under NRHP Criterion A for its association with the development of the airfield and its support function for significant Navy jet missions during the early Cold War. As such, Building 158 is considered to be significant as a potential contributor under this criterion with a period of significance from 1954-1961 (Page & Turnbull 2018).



Photograph 4: Primary (west) elevation of Building 158

Building 158 was evaluated individually under Criterion C (architecture) in 2000 as part of the Section 106 process for the development of the NASA Ames Research Center Development Plan (2002). Although the building has a notable International style, it was found to not to be individually significant under this criterion (Page & Turnbull 2018).

Page & Turnbull (2018) developed a comprehensive list of Building 158's character-defining features as a potential contributor to the NAS Sunnyvale Historic District. This list accounts for

two categories of character-defining features – primary significance and secondary significance. Features or spaces of primary significance include the most historic components of the building that date to the period of significance (1954-1961) and retain a high degree of historic integrity. Features and spaces of secondary significance are those that date to the period of significance (1954-1961), but have been modified, partially removed, and/or retain a moderate degree of integrity.

Primary Significance

- Irregular rectangular plan and boxed massing
- Direct access to airfield and alignment with the airfield
- One-story west volume at the primary façade (west)
- Flat roof with overhanging eaves
- Plain stucco cladding with grooved articulation and chamfered corners
- Engaged square tower with glazed, octagonal flight control room
- Projection on west façade under a deep roof overhang
- Concrete steps leading to exterior entrances
- Concrete arrival platform and projecting roof at east façade
- Double panel doors with upper windows and transoms
- Original window patterns
- Three-lite windows with central awning lite arranged individually or in ribbons of two or three
- Ribbons of narrow three-lite windows on second story of the entrance projection
- Awning windows near top of the square portion of the control tower
- Vertically oriented windows on the east façade of the control tower
- Ribbons of windows on the second story of east façade
- Protruding windowsills with lower drip edge
- Uninterrupted views of the airfield

Secondary Significance

- Single-panel personnel doors with upper windows
- Metal guardrails, caged ladders, and semi-octagonal step-out on control tower
- Interior entrance lobby and waiting room.
- Location and configuration of interior stairwells
- Central corridor / north-south axis in original building
- Low lying shrubs and lawns at west façade

Effects Assessment

No previously identified archaeological resources were identified in the APE, and the APE is within an area of low archaeological sensitivity. Ground disturbance for the undertaking will be limited, and it appears the area has been previously disturbed. Due to the proposed scope and lack of archaeological sensitivity, no archaeological historic properties will be affected by the undertaking.

The project will alter Building 158 with the addition of an ADA-compliant ramp at the concrete arrival platform at east façade (a primary character-defining feature), which will require partial

removal of the existing metal guardrail at the south end of the concrete arrival platform (see Photograph 2). The new ramp will also be adjacent to the concrete stairs (a primary character-defining feature). However, the alteration of these character-defining features will not diminish the integrity of the Building 158.

- The ramp will not modify the existing concrete stairs or affect the historic entry progression using the stairs towards the center of the concrete arrival platform.
- The new ramp will be abutted to the structure but will not alter the form of the concrete arrival platform's massing or materials.
- The placement of the ramp will not obscure a substantial portion of the concrete arrival platform or any other character-defining features of Building 158.
- The modular ramp will be differentiated from the historic materials but compatible in profile because it will not exceed the height of the concrete arrival platform.
- Removal of a portion of the existing metal tube railing to allow access between the ramp and the platform will result in a loss of historic materials, but the majority of the existing metal tube railing will remain.
- If the ramp were removed in the future, the missing portion of the metal tube railing could be easily reconstructed in-kind to match the existing and any connecting points to the concrete arrival platform could be patched and repaired in kind.

In total, the alterations will have minimal impact on the ability of Building 158 to convey its historical associations as an NRHP eligible contributor to the expanded NAS Sunnyvale Historic District, and in turn, the project will have minimal impact on the integrity of the NAS Sunnyvale Historic District. The nearest district contributor, MF 1002, the parking apron to the northeast of Building 158, is an expanse of pavement that is vast in scale in comparison to the proposed project and is not included in the APE (see Figure 3). The project will not significantly alter the characteristics of the historic property in a manner that will diminish its integrity.

This assessment was conducted by Trina Meiser, M.A., and Jennifer Redmond, M.A., RPA, who meet the Secretary of the Interior's professional qualifications standards (48 Federal Register 44738) in architectural history and archaeology, respectively.

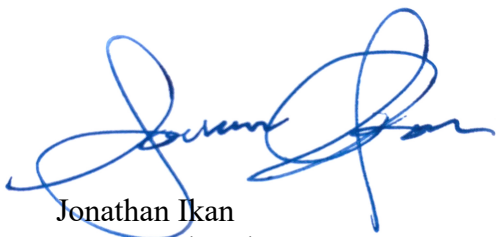
Finding of Effect

Based on the analysis conducted by qualified professionals who meet the Secretary of the Interior's professional qualifications standards, NASA ARC has made a finding of No Adverse Effect.

NASA ARC requests the SHPO's concurrence on NASA ARC's finding of No Adverse Effect related to this project pursuant to 36 CFR 800.5(b). NASA requests the SHPO's response within 30 days of receipt of this letter, as specified in 36 CFR 800.5(c).

Please contact me at jonathan.d.ikan@nasa.gov or at (650) 604-6859 with your comments or questions.

Sincerely,



Jonathan Ikan
Center Cultural Resources Manager



Ames Research Center, MS 213-8
Moffett Field, California 94035

cc:

HQ/EMD/Rebecca Klein, Ph.D., RPA

References

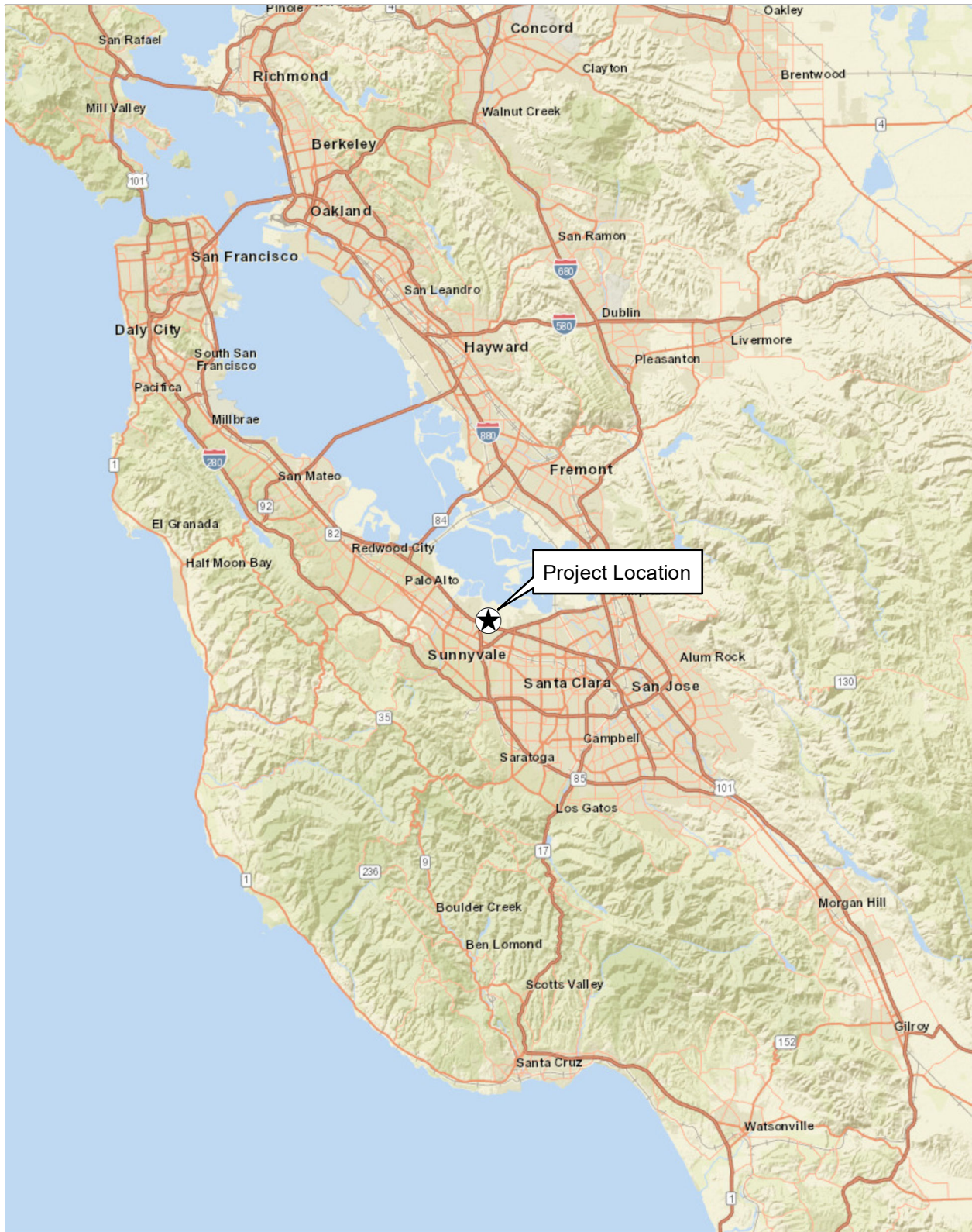
AECOM, 2017. *NASA Ames Research Center Archaeological Resources Study*. Accessible online (redacted) at

https://historicproperties.arc.nasa.gov/downloads/section106_achaeology_20170224_nasa_att.pdf

Page & Turnbull, 2018. *Building 158 Renovations Project Section 106 Technical Report*. Accessible online at https://historicproperties.arc.nasa.gov/downloads/s106_Bldg158_20180228_nasa_report.pdf

Enclosures

Figures



Source: ESRI, AECOM, NASA



0 5 10 20 Miles



Scale: 1 = 633,600; 1 inch = 10 mile(s)

Figure 1
Project Location

Building 158 Airside Accessibility Ramp Project

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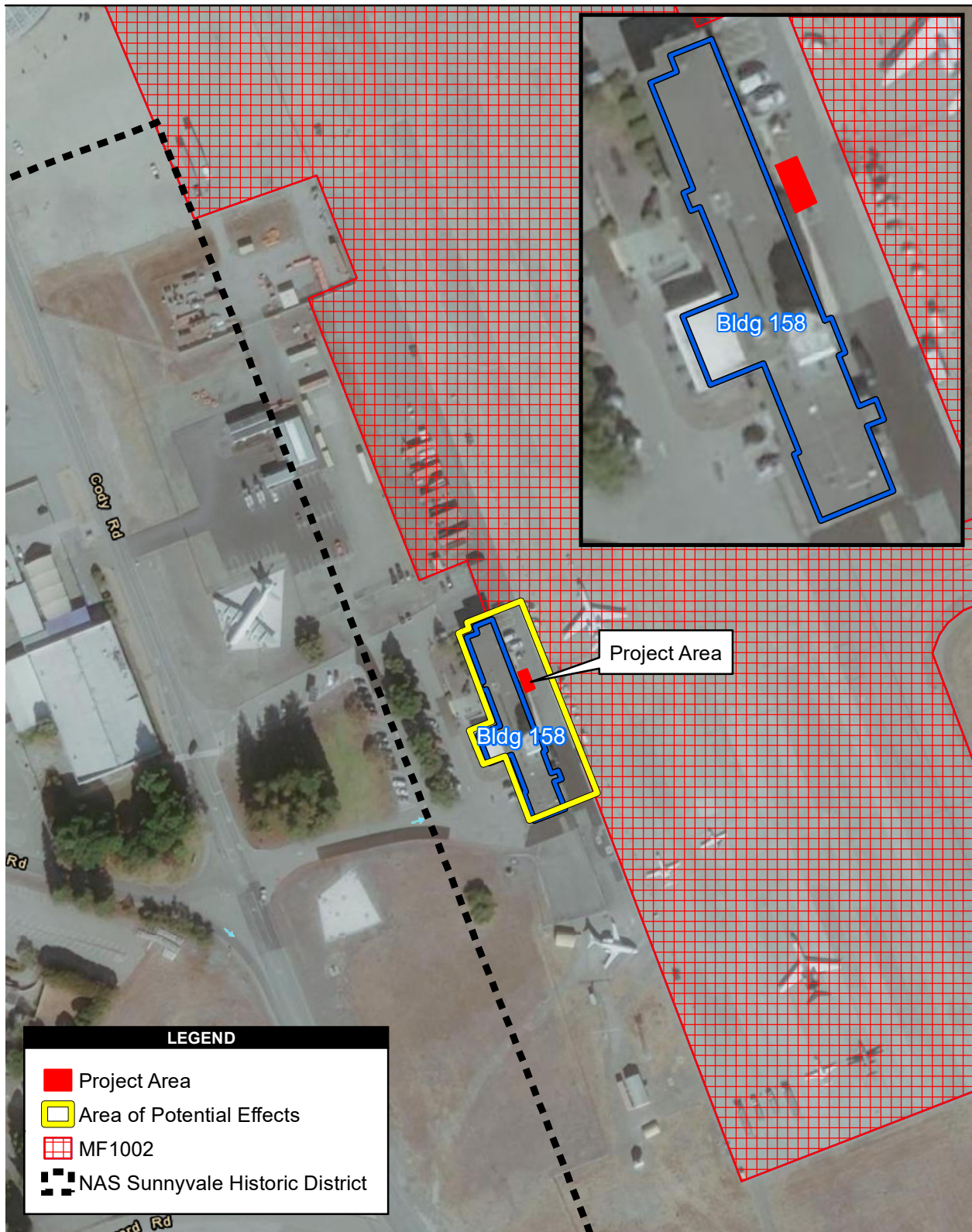
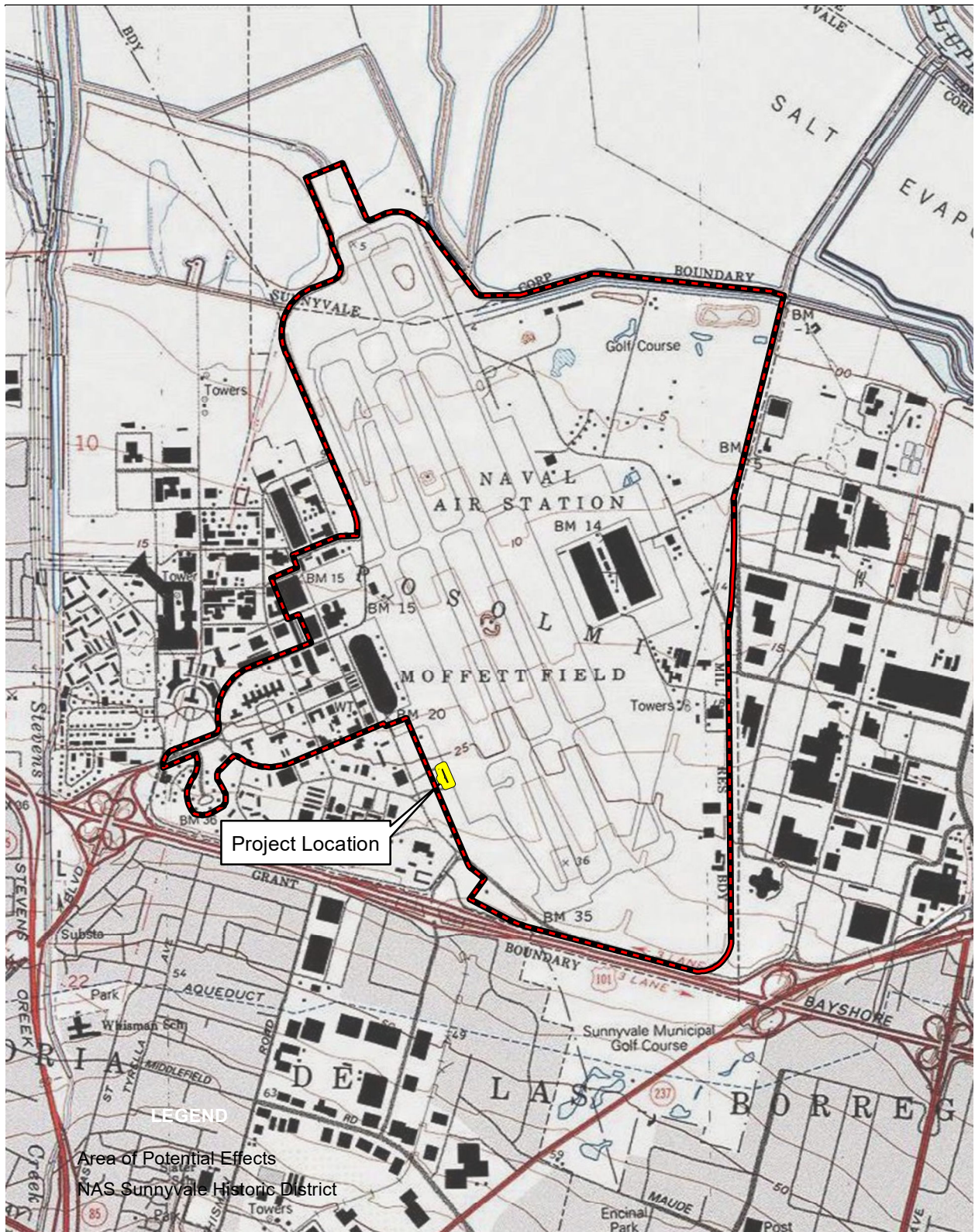


Figure 3
APE Map

Building 158 Airside Accessibility Ramp Project

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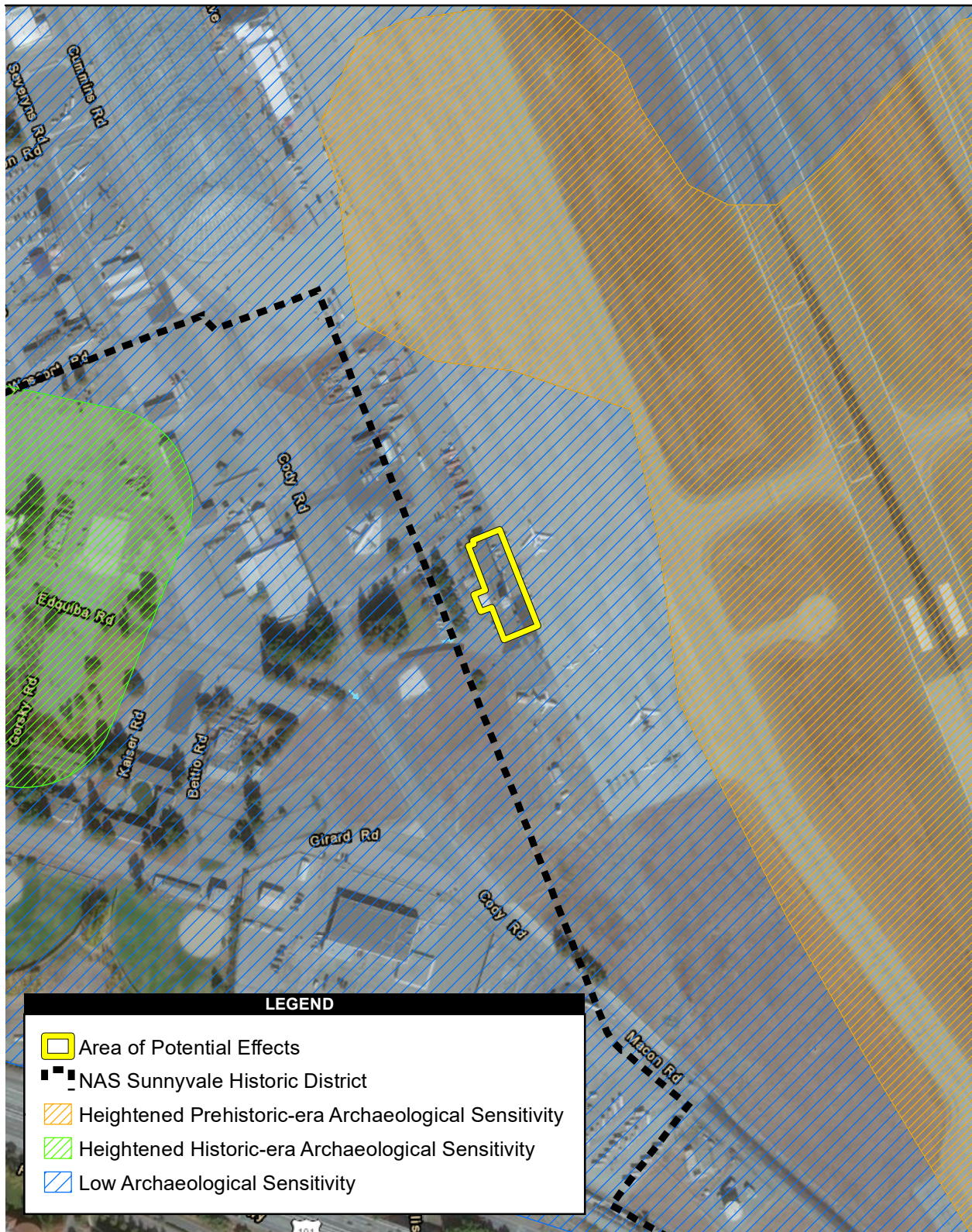
Source: ESRI, AECOM, NASA, National Geographic Society; USGS 7.5' Topographic Quadrangle: Mountain View



Figure 2
Project Site

Building 158 Airside Accessibility Ramp Project

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Source: ESRI, AECOM, NASA



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Scale: 1 = 4800; 1 inch = 400 feet

Figure 4
Archaeological Sensitivity Map

Building 158 Airside Accessibility Ramp Project

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